CLAIMS

1. A capacitor comprising:

a first sheet having a top side and a bottom side;

a first capacitor plate formed by a first marking printed in electroconductive material on the top side of the first sheet; and

a second capacitor plate formed by a second marking printed in electroconductive material on the bottom side of the first sheet,

wherein the second marking is printed substantially directly below the first marking to form a capacitor adapted to be connected to a current source.

2. The capacitor according to claim 1, wherein the first sheet is selected from the group consisting of paper, fabric, plastic, Mylar, Tyvek, and paperboard.

3. The capacitor according to claim 1, further comprising:

an insulator;

a second sheet having a top side and a bottom side,

a third capacitor plate formed by a third marking printed in electroconductive material on the top side of the second sheet; and

a fourth capacitor plate formed by a fourth marking printed in electroconductive material on the bottom side of the second sheet,

wherein the fourth marking is printed substantially directly below the third marking, wherein the first sheet and the second sheet are superimposed such that the second marking is separated from the third marking by the insulator, and wherein the first and fourth markings are adapted to have a voltage source thereacross.

4. The capacitor according to claim 3, wherein the first and the second sheets are selected from the group consisting of paper, fabric, plastic, Mylar, Tyvek, and paperboard.

5. The capacitor according to claim 1, wherein the first and the second markings are printed with inkjet ink or laserjet toner.

6. The capacitor according to claim 3, wherein the first, second, third, and fourth markings are printed with inkjet ink or laserjet toner.

7. The capacitor according to claim 1, further comprising:

an insulator covering said first marking; and

a third marking, adapted to be connected to a current source, printed in electroconductive material on top of the insulator opposite said first marking.

8. An inductor component comprising:

a first sheet having a top side and a bottom side;

a first series of parallel lines having first and second ends, said first series of parallel lines being printed in electroconductive material on the top side of the first sheet,

wherein the first series of parallel lines is printed at a first angle with respect to a first edge of the first sheet, said first angle being non-normal to the first edge of the first sheet, wherein the first ends of the first series of parallel lines extend to the first edge, and wherein the first sheet is adapted to be rolled.

9. The inductor component according to claim 8, wherein if the first sheet is rolled, each of the first ends of the first series of parallel lines at the first edge of the first sheet will engage a point on a different line in the first series of parallel lines to form a first coil, and wherein the ends of the first coil are adapted to be connected to a current source to create a voltage potential across the length of the first coil.

10. The inductor component according to claim 9, wherein the second ends of the first series of parallel lines are at a second edge of the first sheet opposite the first edge.

11. The inductor component according to claim 9, wherein the second ends of the first series of parallel lines do not extend to a second edge of the sheet opposite the first edge.

12. The inductor component according to claim 10, wherein second ends are the points at which each of the first ends of the first series of parallel lines engage a different line in the first series of parallel lines.

13. The inductor component according to claim 10, wherein the points at which each of the first ends of the first series of parallel lines engage a different line in the first series of parallel lines are between the first ends and the second ends.

14. The inductor component according to claim 11, wherein second ends are the points at which each of the first ends of the first series of parallel lines engage a different line in the first series of parallel lines.

15. The inductor component according to claim 11, wherein the points at which each of the first ends of the first series of parallel lines engage a different line in the first series of parallel lines are between the first ends and the second ends.

16. The inductor component according to claim 9, wherein the first sheet is selected from the group consisting of paper, fabric, plastic, Mylar, Tyvek, and paperboard.

17. The inductor component according to claim 9, further comprising:

a second sheet having a top side and a bottom side,

a second series of parallel lines with first and second ends, said second series of parallel lines being printed in electroconductive material on the top side of the second sheet,

wherein the second series of parallel lines is printed at a second angle with respect to a first edge of the second sheet, said second angle being non-normal to the first edge of the second sheet, wherein the first ends of the second series of parallel lines extend to the first edge of the second sheet, and wherein the second sheet is rolled so that each of the first ends of the second series of parallel lines at the first edge of the second sheet will engage a point on a different line in the second series of parallel lines to form a second coil.

18. The inductor component according to claim 17, wherein the first sheet is superimposed over the second sheet such that the bottom side of the first sheet is in contact with the top side of the second sheet, wherein the first series of parallel lines is substantially superimposed directly over the second series of parallel lines, and wherein the second sheet is concentrically rolled with the first sheet.

19. The inductor component according to claim 17, wherein when the first sheet and the second sheet are concentrically rolled to form the first coil and second coil, the concentric sheets are adapted to have inductance and capacitance properties when the ends of the first coil are connected across a current source.

20. The inductor component according to claim 9, further comprising:

a second series of parallel lines with first and second ends, said second series of parallel lines being printed in electroconductive material on the bottom side of the first sheet,

wherein the second series of parallel lines is printed at a second angle with respect to the first edge of the first sheet, said second angle being non-normal to the first edge of the first sheet, wherein the first ends of the second series of parallel lines

extend to the first edge of the first sheet, and wherein the first sheet is rolled so that each of the first ends of the second series of parallel lines at the first edge of the first sheet will engage a point on a different line in the second series of parallel lines to form a second coil.

21. The inductor component according to claim 20, wherein the first series of parallel lines is substantially superimposed directly over the second series of parallel lines.

22. The inductor component according to claim 21, wherein when the first sheet is rolled to form the first coil and second coil, the first sheet is adapted to have inductance and capacitance properties when the ends of the first coil are connected across a current source.

23. The inductor component according to claim 17, wherein the first sheet and second sheet are selected from the group consisting of paper, fabric, plastic, Mylar, Tyvek, and paperboard.

24. The inductor component according to claim 9, wherein the electroconductive material printed on the first and the second sheets is inkjet ink or laserjet toner.

25. The inductor component according to claim 17, wherein the first and the second series of parallel lines are printed with inkjet ink or laserjet toner.

26. The inductor component according to claim 8, wherein the inductor component is adapted to be slug tuned.

27. A transformer comprising:

a first sheet having a top side and a bottom side;

a first series of parallel lines with first and second ends, said first series of parallel lines printed in electroconductive material on the top side of the first sheet;

a second sheet having a top side and a bottom side; and

a second series of parallel lines with first and second ends, said second series of parallel lines being printed in electroconductive material on the top side of the second sheet,

wherein the first series of parallel lines is printed at a first angle with respect to a first edge of the first sheet, said first angle being non-normal to the first edge of the first sheet, wherein the first ends of the first series of parallel lines extend to the first edge of the first sheet, wherein the second series of parallel lines is printed at a second angle with respect to a first edge of the second sheet, said second angle being non-normal to the first edge of the second sheet, wherein the first ends of the second series of parallel lines extend to the first edge of the second sheet, wherein either the magnitude of the second angle is different from the magnitude of the first angle or the number of lines in the first series of parallel lines per unit length of the first sheet is different from the number of lines in the second series of parallel lines per unit length of the second sheet, wherein the first sheet is rolled so that each of the first ends of the first series of parallel lines at the first edge of the first sheet will engage a point on a different line in the first series of parallel lines to form a first coil, wherein the ends of the first coil are adapted to be connected to a current source, wherein the second sheet is rolled so that each of the first ends of the second series of parallel lines at the first edge of the second sheet will engage a point on a different line in the second series of parallel lines to form a second coil, wherein the number of turns in the first coil is different from the number of turns in the second coil, and wherein when the ends of the first coil are connected to a current source and the second coil is placed in a close proximity relationship to the first coil, a voltage potential will be generated along the length of the second coil.

28. The transformer according to claim 27, wherein the first sheet and second sheet are selected from the group consisting of paper, fabric, plastic, Mylar, Tyvek, and paperboard.

29. The transformer according to claim 27, wherein the first and second series of parallel lines are printed with inkjet ink or laserjet toner.

30. The transformer according to claim 27, wherein the close proximity relationship is a side-by-side relationship.

31. The transformer according to claim 27, wherein the close proximity relationship is a concentric relationship.

32. The transformer according to claim 27, wherein the second coil is subject to a voltage tap thereby allowing more than one voltage to be supplied by the second coil.

33. An isolation transformer comprising:

a sheet having a top side and a bottom side;

a first series of parallel lines with first and second ends, said first series of parallel lines printed in electroconductive material on the top side of the sheet; and

a second series of parallel lines with first and second ends, said second series of parallel lines being printed in electroconductive material on the bottom side of the sheet,

wherein the first series of parallel lines is printed at a first angle with respect to a first edge of the sheet, said first angle being non-normal to the first edge of the sheet, wherein the first ends of the first series of parallel lines extend to the first edge of the sheet, wherein the second series of parallel lines is printed at a second angle with respect to the first edge of the sheet, said second angle being non-normal to the first edge of the sheet, wherein the first ends of the second series of parallel

lines extend to the first edge of the sheet, wherein either the magnitude of the second angle is different from the magnitude of the first angle or the number of lines in the first series of parallel lines per unit length of the sheet is different from the number of lines in the second series of parallel lines per unit length of the sheet, wherein the sheet is rolled so that each of the first ends of the first series of parallel lines at the first edge of the sheet will engage a point on a different line in the first series of parallel lines to form a first coil and so that each of the first ends of the second series of parallel lines at the first edge of the sheet will engage a point on a different line in the second series of parallel lines to form a second coil, wherein the ends of the first coil are adapted to be connected to a current source, wherein the number of turns in the first coil is different from the number of turns in the second coil, and wherein when the ends of the first coil are connected to a current source, a voltage potential will be generated along the length of the second coil.

34. The isolation transformer according to claim 33, wherein the sheet is selected from the group consisting of paper, fabric, plastic, Mylar, Tyvek, and paperboard.

35. The isolation transformer according to claim 33, wherein the first and second series of parallel lines are printed with inkjet ink or laserjet toner.

36. An isolation transformer comprising:

a sheet having a top side and a bottom side;

a first series of parallel lines with first and second ends, said first series of parallel lines printed in electroconductive material on the top side of the sheet;

an insulator covering said first series of parallel lines; and

a second series of parallel lines with first and second ends, said second series of parallel lines being printed in electroconductive material on top of the insulator opposite said first series of parallel lines,

wherein the first series of parallel lines is printed at a first angle with respect to a first edge of the sheet, said first angle being non-normal to the first edge of the sheet, wherein the first ends of the first series of parallel lines extend to the first edge of the sheet, wherein the second series of parallel lines is printed at a second angle with respect to the first edge of the sheet, said second angle being non-normal to the first edge of the sheet, wherein the first ends of the second series of parallel lines extend to the first edge of the sheet, wherein either the magnitude of the second angle is different from the magnitude of the first angle or the number of lines in the first series of parallel lines per unit length of the sheet is different from the number of lines in the second series of parallel lines per unit length of the sheet, wherein the sheet is rolled so that each of the first ends of the first series of parallel lines at the first edge of the sheet will engage a point on a different line in the first series of parallel lines to form a first coil and so that each of the first ends of the second series of parallel lines at the first edge of the sheet will engage a point on a different line in the second series of parallel lines to form a second coil, wherein the ends of the first coil are adapted to be connected to a current source, wherein the number of turns in the first coil is different from the number of turns in the second coil, and wherein when the ends of the first coil are connected to a current source, a voltage potential will be generated along the length of the second coil.

37. The isolation transformer according to claim 36, wherein the sheet is selected from the group consisting of paper, fabric, plastic, Mylar, Tyvek, and paperboard.

38. The isolation transformer according to claim 36, wherein the first and second series of parallel lines are printed with inkjet ink or laserjet toner.